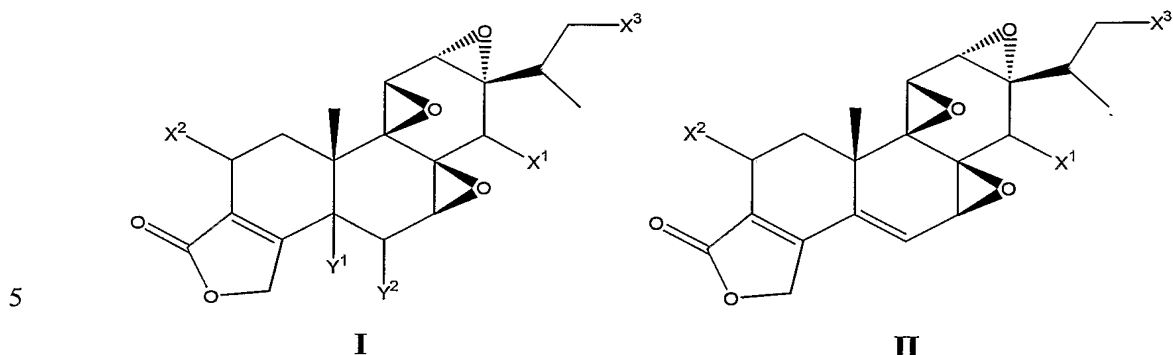


IT IS CLAIMED:

1. A compound having the structure I or II:



where

- X^1 is OR^1 , where R^1 is selected from hydrogen, $C(=O)R^2$, and $C(=O)OR^2$, where R^2 is selected from alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, aralkyl, hydroxyalkyl, alkoxyalkyl, aryloxyalkyl, and acyloxyalkyl;
- 10 X^2 and X^3 are independently OR^1 or hydrogen, at least one of X^2 and X^3 being hydrogen; and where

- (i) Y^1 is hydrogen and Y^2 is selected from the group consisting of hydroxyl, halogen, cyano, nitromethyl, ethenyl, $-CH_2COOR^4$, $N(R^4)_2$, and SR^4 , where each R^4 is
- 15 independently selected from hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, aralkyl, hydroxyalkyl, alkoxyalkyl, aryloxyalkyl, and acyloxyalkyl, or, in the case of $N(R^4)_2$, taken together form a 5- to 7-member heterocyclic ring whose ring atoms are selected from the group consisting of carbon, nitrogen, oxygen and sulfur, wherein the ring atoms include at most 3 heteroatoms; or
- 20 (ii) Y^1 is hydroxyl and Y^2 is selected from the group consisting of hydrogen, hydroxyl, halogen, cyano, $N(R^4)_2$, and SR^4 ; or
- (iii) Y^1 and Y^2 taken together form an epoxide ring.

2. A compound as recited in claim 1, where R^1 is selected from hydrogen and $C(=O)R^2$.

3. A compound as recited in claim 2, where R^2 is selected from alkyl, aryl, aralkyl, and alkoxyalkyl.

4. A compound as recited in claim 3, where R^2 is selected from lower alkyl, phenyl, and benzyl.
5. A compound as recited in claim 2, where R^1 is hydrogen.
6. A compound as recited in claim 1, wherein each of X^2 and X^3 is hydrogen.
7. A compound as recited in claim 1, having the structure **II**.
8. A compound as recited in claim 7, wherein each of X^2 and X^3 is hydrogen.
9. A compound as recited in claim 1, having the structure **I**.
10. A compound as recited in claim 9, wherein each of X^2 and X^3 is hydrogen.
11. A compound as recited in claim 10, wherein Y^1 is hydrogen and Y^2 is selected from the group consisting of hydroxyl, halogen, cyano, nitromethyl, ethenyl, $-\text{CH}_2\text{COOR}^4$, $\text{N}(\text{R}^4)_2$, and SR^4 .
12. A compound as recited in claim 11, wherein Y^2 is hydroxyl, fluoro, chloro, bromo, cyano, $-\text{CH}_2\text{COOR}^4$, or $\text{N}(\text{R}^4)_2$.
13. A compound as recited in claim 12, wherein Y^2 is hydroxyl, fluoro, chloro, bromo, or cyano.
14. A compound as recited in claim 13, wherein Y^2 is hydroxyl.
15. A compound as recited in claim 13, wherein Y^2 is cyano.
16. A compound as recited in claim 10, wherein Y^1 is hydroxyl and Y^2 is selected from the group consisting of hydrogen, hydroxyl, halogen, cyano, $\text{N}(\text{R}^4)_2$, and SR^4 .

17. A compound as recited in claim 16, wherein Y² is hydrogen, hydroxyl, fluoro, chloro, bromo, or cyano.

5 18. A compound as recited in claim 17, wherein Y² is hydrogen.

19. A compound as recited in claim 17, wherein Y² is hydroxyl.

20. A compound as recited in claim 10, wherein Y¹ and Y² taken together form an
10 epoxide ring.

21. A compound as recited in claim 1, wherein the groups defined as R², R³, and R⁴,
when selected from alkyl, alkenyl, and alkynyl, have up to six carbon atoms; when
selected from cycloalkyl, have 3 to 7 carbon atoms; when selected from cycloalkenyl,
15 have 5 to 7 carbon atoms; and when selected from aralkyl, hydroxyalkyl, alkoxyalkyl,
aryloxyalkyl, and acyloxyalkyl, have alkyl components having up to six carbon atoms.

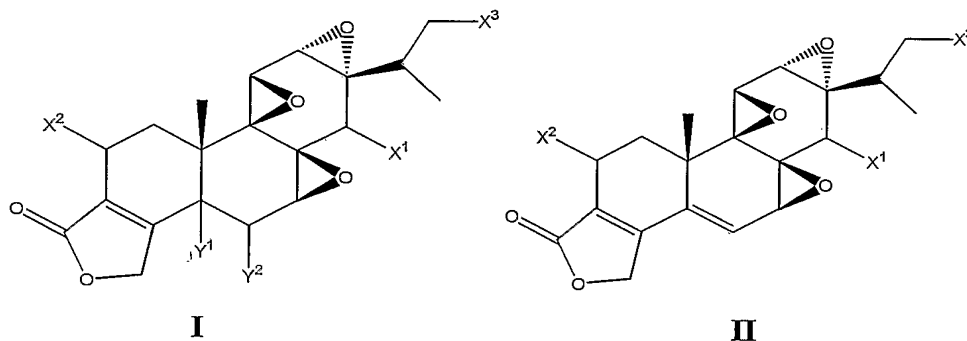
22. A compound as recited in claim 21, wherein said alkyl, alkenyl, and alkynyl groups or
components have up to four carbon atoms.

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23. A compound as recited in claim 21, wherein said alkyl, alkenyl, and alkynyl groups or
components have one or two carbon atoms.

24. A compound as recited in claim 1, wherein each of the groups defined as R², R³, and
25 R⁴ is independently selected from alkyl, aryl, aralkyl, and alkoxyalkyl.

25. A method of effecting immunosuppression, comprising administering to a subject in need of such treatment, an effective amount of a compound of formula I or II:



where

X^1 is OR^1 , where R^1 is selected from hydrogen, $C(=O)R^2$, and $C(=O)OR^2$, where R^2 is selected from alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, aralkyl, hydroxyalkyl, alkoxyalkyl, aryloxyalkyl, and acyloxyalkyl;

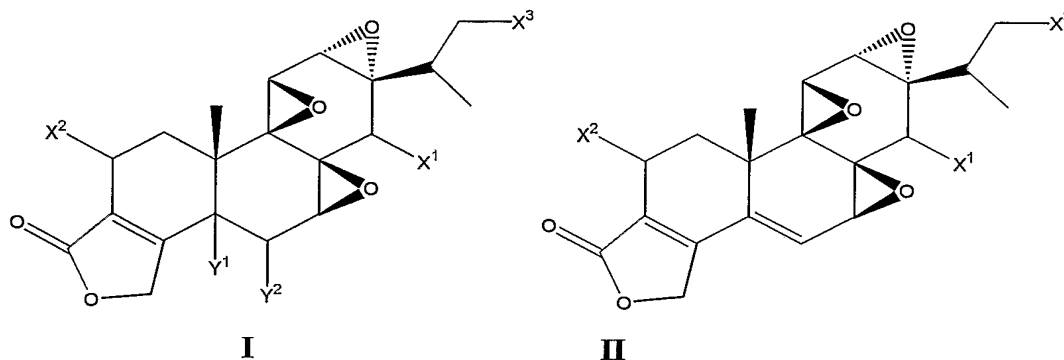
X^2 and X^3 are independently OR^1 or hydrogen, at least one of X^2 and X^3 being hydrogen; and where

(i) Y^1 is hydrogen and Y^2 is selected from the group consisting of hydroxyl, halogen, cyano, nitromethyl, ethenyl, $-CH_2COOR^4$, $N(R^4)_2$, and SR^4 , where each R^4 is independently selected from hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, aralkyl, hydroxyalkyl, alkoxyalkyl, aryloxyalkyl, and acyloxyalkyl, or, in the case of $N(R^4)_2$, taken together form a 5- to 7-member heterocyclic ring whose ring atoms are selected from the group consisting of carbon, nitrogen, oxygen and sulfur, wherein the ring atoms include at most 3 heteroatoms; or

(ii) Y^1 is hydroxyl and Y^2 is selected from the group consisting of hydrogen, hydroxyl, halogen, cyano, $N(R^4)_2$, and SR^4 ; or

(iii) Y^1 and Y^2 taken together form an epoxide ring.

26. A method of inducing apoptosis in a cell, comprising contacting said cell with an effective amount of a compound of formula **I** or **II**:



where

X^1 is OR^1 , where R^1 is selected from hydrogen, $C(=O)R^2$, and $C(=O)OR^2$, where R^2 is selected from alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, aralkyl, hydroxyalkyl, alkoxyalkyl, aryloxyalkyl, and acyloxyalkyl;

X^2 and X^3 are independently OR^1 or hydrogen, at least one of X^2 and X^3 being hydrogen; and where

(i) Y^1 is hydrogen and Y^2 is selected from the group consisting of hydroxyl, halogen, cyano, nitromethyl, ethenyl, $-CH_2COOR^4$, $N(R^4)_2$, and SR^4 , where each R^4 is independently selected from hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, aralkyl, hydroxyalkyl, alkoxyalkyl, aryloxyalkyl, and acyloxyalkyl, or, in the case of $N(R^4)_2$, taken together form a 5- to 7-member heterocyclic ring whose ring atoms are selected from the group consisting of carbon, nitrogen, oxygen and sulfur, wherein the ring atoms include at most 3 heteroatoms; or

(ii) Y^1 is hydroxyl and Y^2 is selected from the group consisting of hydrogen, hydroxyl, halogen, cyano, $N(R^4)_2$, and SR^4 ; or

(iii) Y^1 and Y^2 taken together form an epoxide ring.